

What is claimed is:

1. A method for reducing ground loop noise, comprising:
providing an electrical power connector comprising an electrical ground;
5 electrically connecting a current blocking device to the electrical ground;
enabling up to a predetermined level of voltage to be present on the electrical ground;
and
preventing voltage on the electrical ground from converting to a current flow using
the current blocking device unless the predetermined level of voltage is exceeded.
10
2. The method of claim 1, further comprising the step of connecting the current blocking
device in series with the electrical ground.
3. The method of claim 1, wherein the current blocking device comprises at least one
15 diode.
4. The method of claim 3, wherein multiple diodes are configured in an antiparallel
orientation.
- 20 5. The method of claim 3, wherein the diode is an avalanche diode.
6. The method of claim 5, wherein multiple avalanche diodes are configured in an
antiseriess orientation.

7. The method of claim 1, wherein the current blocking device clamps the voltage on the electrical ground to a predetermined level.

8. The method of claim 1, wherein the current blocking device comprises a varistor.

5

9. The method of claim 1, further comprising the step of integrating the current blocking device into an electronic device.

10. A device for reducing ground loop noise, comprising:

10 a connector for receiving electrical power, the connector comprising an electrical ground; and

a current blocking device electrically connected to the electrical ground for enabling up to a predetermined level of voltage to be present on the electrical ground and preventing voltage on the electrical ground from converting to a current flow when the predetermined

15 level of voltage is not exceeded.

11. The device of claim 10, wherein the current blocking device is attached in series with the electrical ground.

20 12. The device of claim 10, wherein the current blocking device comprises a single diode

13. The device of claim 10, wherein the current blocking device comprises two or more diodes.

14. The device of claim 13, wherein the two or more diodes are configured in an antiparallel orientation.

15. The device of claim 14, wherein the diode comprises an avalanche diode.

5

16. The device of claim 12, wherein the current blocking device comprises two or more avalanche diodes.

17. The device of claim 16, wherein the two or more avalanche diodes are configured in
10 an antiseriess orientation.

18. The device of claim 12, wherein the current blocking device is configured to clamp the voltage on the electrical ground to a predetermined level.

15 19. The device of claim 12, wherein the current blocking device comprises a varistor.

20. The device of claim 12, wherein the current blocking device is integrated into an electronic device.